

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Original) A thermal control film for use in spacecraft comprising a multi-layer interference filter adapted to exhibit preselected high absorbency and emissive characteristics in the far infrared wavelength range 2.5 $\mu$ m to 50 $\mu$ m, low absorbency characteristics in the solar spectrum range 200-2500nm and high transmissive characteristics in the microwave frequency spectrum 1 to 30GHz.
2. (Original) A thermal control film according to claim 1, where the film is free from metal.
3. (Original) A thermal control film according to claim 1, where the film covers the active face of an antenna carried by the spacecraft.
4. (Currently Amended) A thermal control film according to ~~claims 1 to 3~~ claim 1, wherein the film is in the form of a flexible sheet.
5. (Currently Amended) A thermal control film according to ~~claims 1 or 2~~ claim 1 wherein the film is in the form of a liquid coating to be applied to a surface of the spacecraft.
6. (Currently Amended) A thermal control film according to ~~any preceding claim~~ claim 1 wherein the multi-layer interference filter is a polymeric structure.

7. (Currently Amended) A thermal control film according to ~~any preceding claim~~ claim 1, wherein the multi-layer interference filter comprises one or more layers of any of combination of  $\text{SiO}_2$ ,  $\text{SiO}_x\text{N}_y$ , and  $\text{Si}_3\text{N}_4$ .
8. (Original) A thermal control film according to claim 7, wherein the film is in the form of a plurality of tiles.
9. (Currently Amended) A thermal control film according to ~~any preceding claim~~ claim 1, wherein the thickness of the film is less than 200microns.
10. (Currently Amended) A thermal control film according to ~~any preceding claim~~ claim 1, wherein the thickness of the film is in the range of 50 to 150microns.
11. (Currently Amended) An antenna comprising a thermal control film according to ~~any preceding claim~~ claim 1, covering the active face thereof.
12. (New) A thermal control film according to claim 2, wherein the film is in the form of a flexible sheet.
13. (New) A thermal control film according to claim 12 wherein the film is in the form of a liquid coating to be applied to a surface of the spacecraft.
14. (New) A thermal control film according to claim 13 wherein the multi-layer interference filter is a polymeric structure.
15. (New) A thermal control film according to claim 14, wherein the multi-layer interference filter comprises one or more layers of any of combination of  $\text{SiO}_2$ ,  $\text{SiO}_x\text{N}_y$ , and  $\text{Si}_3\text{N}_4$ .
16. (New) A thermal control film according to claim 15, wherein the film is in the form of a plurality of tiles.

17. (New) A thermal control film according to claim 16, wherein the thickness of the film is less than 200microns.
18. (New) A thermal control film according to claim 17, wherein the thickness of the film is in the range of 50 to150microns.
19. (New) An antenna comprising a thermal control film according to claim 18, covering the active face thereof.
20. (New) A thermal control film according to claim 3, wherein the film is in the form of a flexible sheet.